

### **FOR**

Enduring Beauty • Uniform Resiliency

Extra Long Life • Long-Run Economy

### IN

Armories, Auditoriums, Bakeries, Ballrooms, Classrooms, Gymnasiums, Industrial Buildings, Laboratories, Machine Shops, Newspaper Plants, Post Offices and Recreation Halls.

## ronbound CONTINUOUS STRIP



# WHAT IRONBOUND IS — IRONBOUND CONTINUOUS STRIP Hardwood Floors are nationally recognized for their ability to combine heauty resiliency and long run economy

bine beauty, resiliency and long run economy in public, commercial and industrial buildings. IRONBOUND is so-called because each individual flooring strip is interlocked by means of long-length sawtoothed steel splines, fitted into carefully machined grooves at both ends of each strip. The flooring itself is selected from finest strips of hardwood, primarily Northern Hard Maple. This dense, strong, close-fibered wood has a flint-like surface that is easy to maintain and resists wear and pointed pressure. It can be attractively finished to accentuate the beauty of the grain and natural warm color. Since its development over a quarter of a century ago, IRONBOUND has been steadily recognized by an increasing number of architects, builders, school and industrial officials as the finest, most serviceable flooring for any installation where the floor must withstand heavy traffic and remain smooth, beautiful and uniformly resilient.

**HOW IT'S MADE**— "From forest to floor," quality is the IRONBOUND watchword. Every element of the floor is the finest possible to pro-

duce. The flooring is only the choicest hardwood. The sawtooth steel splines, cork cushioning and mastic are top quality, too. In IRONBOUND's manufacture, the flooring is smoothly cut by precision methods and machines in exact lengths and thicknesses to assure the finest floor obtainable.

# UOUS STRIP floor is an individually engineered installation. Uniform flooring strips are laid in permanently plastic cutback asphalt mastic in and abutting courses rupning in one direction

HOW IT'S LAID-Each IRONBOUND CONTIN-

permanently plastic cutback asphalt mastic in end-abutting courses running in one direction only. Each course is securely interlocked with adjacent courses by means of the sawtoothed steel spline. The natural expansion and contraction of the wood is minimized and controlled by the splines. This system is called CONTINUOUS STRIP and provides a controlled and integrated floor structure with a permanently smooth, level and long-wearing surface.

In gymnasiums and areas where added resilience is desirable, resilient 1/2" corkboard underlayment, set in mastic, is recommended.

To insure that the quality of the finished product is worthy of the name, only licensed flooring contractors, qualified by training and experience,

### HARDWOOD FLOORS

are authorized to install IRONBOUND flooring. These contractors, following the standard IRONBOUND procedure every step of the way, assure expert installations. For this reason every IRONBOUND floor is fully guaranteed as to materials and workmanship by *both* contractor and manufacturer.

WHAT IT DOES — IRONBOUND provides a floor that combines toughness, *natural* beauty, uniform resiliency, ease of maintenance, long run economy and the ability to withstand generations of the most severe heavy-duty use.

### **OVER RADIANT HEATING**

IRONBOUND CONTINUOUS STRIP Edge-Grain Maple Floors can be successfully installed and guaranteed over radiant heating. Actual installations in use longer than ten years, and exhaustive tests by nationally-known laboratories stand back of this guarantee. These tests, conducted on an "accelerated" basis to indicate the condition of the floor over a 15 year period, show that IRONBOUND mastic will not deteriorate.

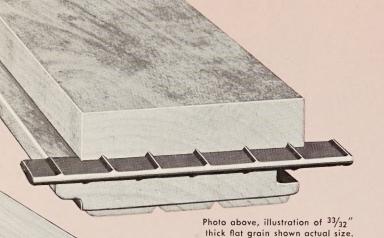
Where additional resilience is a factor, as in gymnasiums, ½ inch cork may be specified under IRONBOUND floors without causing lower thermostatic readings. (A slight time lag is evidenced, of course.)



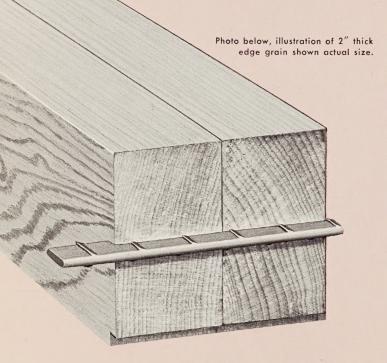




# TYPES OF **ronbound** FLOORING



ard or special tongue and groove for IRONBOUND installations is available in Northern Rock Maple, beech, birch or oak in a choice of three thicknesses: 25/32", 33/32" and 41/32". The 25/32" thickness is sufficiently durable for use in classrooms, multi-purpose rooms, stores and other light duty areas while the 33/32" and 41/32" thicknesses are commonly used in gymnasiums, bakeries and manufacturing plants.



HEAVY DUTY EDGE GRAIN flooring, produced only in Northern Hard Maple and Northern Beech, serves as a most durable and economical hardwood floor. Years of experience have proven that edge grain substantially reduces expansion and contraction and outwears all other wood floor materials. It is especially recommended for installations in gymnasiums and industrial plants or wherever hard wear is expected. Edge grain is also recommended for installations in humid areas. Edge grain is produced in a choice of five thicknesses: 33/32", 11/4", 11/2", 2" and 21/2", in widths from 7/8" to 13/4" and lengths of 8", 10" and 12" (at mill's option). 33/32" and 11/4" thicknesses are milled with special T & G.

### SPECIAL DRI-VAC TREATMENT

EXTRA LONG LIFE and increased stability are now assured by Dri-Vac impregnation of Woodlife PENTAchlorophenol preservative. Dri-Vac controlled vacuum application provides deep, uniform penetration of preservative to reduce moisture absorption and according to recent tests assures approximately 80 percent dimensional stability. This treatment, available on all IRONBOUND flooring at slight additional cost, protects against swelling, shrinking, checking, grain raising, warping and termite and fungi

attack – adds even more years of service to IRON-BOUND's long life.

**NOTE:** All IRONBOUND flooring is graded in accordance with the rules of the Maple Flooring Manufacturers Association. It is obtainable in First, Second and Third Grades (flat grain only) and combination grades, including the specially developed "Second and Better" and "Industrial" Grades (flat grain and edge grain). See specifications for details.

### FOR INSTALLATION IN:

BAKERIES – IRONBOUND floors are particularly well suited for bakery installations. The hard, smooth surface with the grain running in one direction permits easy rolling of heavy trucks and IRONBOUND's uniform resiliency assures employee comfort. The light colored floor is easy to maintain and keep perfectly sanitary. The tight grain affords no lodging place for dirt and the direct cementing of flooring to concrete prevents vermin from getting under floor. For extra protection against vermin and moisture absorption, the flooring is available Dri-Vac treated.

ARMORIES – IRONBOUND floors are ideal for armories because they meet the specific requirements of this type of installation so well. The durability and ease of maintenance provide exceptional long-run economy, the floor keeps its smooth surface and natural warm beauty with minimum upkeep. IRONBOUND's resiliency makes marching and other training easier.

GYMNASIUMS — the reasons IRONBOUND floors are installed in many of the nation's fine gymnasiums are manifold. But perhaps the uniform resiliency (which assures uniform bounce of basketball on entire floor surface), long-wearing qualities, beauty and ease of maintenance are the most important. Coaches and players find that IRONBOUND's resiliency, particularly when installed over corkboard or in CORKUSHION® Mastic, prevents sore leg muscles, ankles and feet and keeps players at their best. School officials appreciate the economy achieved by IRONBOUND's ability to remain smoothly beautiful after generations of hard use and only minimum maintenance.

INDUSTRIAL PLANTS — even where appearance is not particularly important, as in heavy industrial plants, IRONBOUND is preferred over other types of floors. Here, it is selected primarily on the basis of smoothness, durability and comfort. Industrial trucks are easily transported over IRONBOUND's smooth surface and years of the most severe use fail to cause appreciable wear. Employees work better and morale is higher on a comfortable IRONBOUND floor. Its bright beauty promotes good housekeeping throughout the plant. Most important, when it is necessary to move machines, IRONBOUND's construction makes replacement of sections a simple matter.

AND OTHERS, including auditoriums, ballrooms, class-rooms, churches, laboratories, workshops, post offices, recreation halls and commercial buildings — wherever the floor must bear heavy traffic and keep its beauty, smoothness and resiliency.









# ronbound specifications

#### SCHOOLS

**CLASSROOMS** lay 25/32-in. thick IRONBOUND CONTINUOUS STRIP flat-grain maple, 2nd and better grade.

SHOPS lay 33/32-in. or 11/4-in. thick IRONBOUND CONTINUOUS STRIP edge-grain maple, 2nd and better or Industrial grade (specify which).

GYMNASIUMS lay 33/32-in. flat-grain, or 33/32-in. or 11/4-in. edge-grain IRONDBOUND CONTINUOUS STRIP maple, 2nd and better grade. (Edge-grain should always be used in areas below grade.)

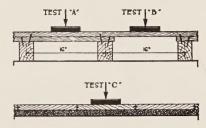
For added resiliency install approved ½-in. or thicker corkboard, impregnated cork or resilient underlayment set in mastic between the IRONBOUND CONTINUOUS STRIP and the concrete subfloor.

In gymnasiums, we recommend the use of specially-developed gym finishes. Apply one coat of approved sealer, buffed as necessary. Then apply court markings, in approved colors, in accordance with plans supplied by architect or owner. Finally, apply two coats of approved gym finish, each thoroughly buffed. (See maintenance note under "Finish" in General Specifications, Page 7.) IRONBOUND contracts should whenever possible include court markings and finish.

All areas below grade, or not over a well-ventilated basement, must be dampproofed before installing IRONBOUND floors (See General Specifications regarding Dampproofing, Page 7.) Edge-grain is recommended for installation in such area.

### COLUMBIA UNIVERSITY RESILIENCY TESTS

Diagrammatic sketch showing method used by Columbia University in determining the relative resiliency underfoot of IRONBOUND floors cushioned with corkboard, as compared with standard nailed floor construction.



Test	Α	1,00
Test	В	1.40
Test	C	1.87

### SHOCK ABSORPTION UNDER 200 LB. LOAD APPLICATION

Maple Flooring Construction	Relative Shock Absorption
With subfloor on sleepers	1.0 midway between sleepers
Same	.0.57 directly over sleeper
Without subfloor on sleepers	.1.40 midway between sleepers
Same	.0.57 directly over sleeper
On 1/2" corkboard	1.87 at all points
On 1" corkboard	2.24 at all points

### Detail of the IRONBOUND gymnasium floor construction.

For expansion joint details, see General Specifications, Page 7.
Architect should specify whether installation of metal angles, thresholds, moldings or other type expansion joint cover is to be included in Wood Flooring Specification or that of other trades.

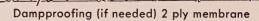
MAPLE

EDGE GRAIN

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AND AND ASSESSMENT OF THE SECOND STREET, SAN THE SECOND STREET, SAN

SUBFLOOR



### RECOMMENDED METHODS OF PROVIDING EXPANSION

KICK STRIP

SHOE MOLD

EXPANSION

SPACE





#### GENERAL SPECIFICATIONS

**CONCRETE SUBFLOORS** — (To be included in Masonry specifications). The surface of the concrete subfloor shall be as nearly a true, level plane as it is possible to produce. All screeds must be carefully checked with a surveyor's level by a competent operator and shall be securely braced against displacement before any concrete is poured. The slab shall be screeded and, when surface water has disappeared, shall be finished with wood floats, by hand, by skilled cement finishers.

Sprinkling with dry cement or cement-and-sand to take up surplus water will not be permitted. When the slab has set, it shall be checked with a straightedge at a sufficient number of locations, as directed by the architect, to demonstrate that the surface is uniformly level throughout. The surface shall not vary by more



than 1/4" from a 10-foot straightedge. If variations in excess of the specified tolerance are present, they shall be reduced by machine grinding, or other approved method.

**LEVELLING** (only when wood floors are to be installed over old concrete subfloors). If the old concrete is not smooth, level and straight as detailed above, work should be done by using IRONBOUND levelling compound (or equal) mixed in proper proportions with sand and cement and trowelled to a smooth surface.

**DAMPPROOFING.** Except where floors are to be laid on upper floors or above a well-ventilated basement, membrane dampproofing must be installed on the concrete subfloor, composed of two plies of 15-lbs. asphalt-saturated felt, each set in cold-trowelled IRONBOUND self-priming asphalt mastic or approved equal, with edges butted and joints offset.

MISCELLANEOUS. Provide adequate expansion voids of a size recommended by flooring contractor (approximately 1/32" to the foot to maximum 11/2") on all sides of rooms, thresholds, columns and permanent fixtures. Cover voids with wood or metal shoemolds, saddles or metal floor plates. (See Gymnasium Details, Page 6.) The finished floor must be free to move underneath these items therefore never secure them to floor or butt against floor. Where expansion voids cannot be covered, insert yellow cork or other compressible material in the exposed voids and sand smooth, flush with floor. (Note in Equipment Installers' Specifications that fixtures, outlet boxes, plates for equipment, bleachers, etc., are not to be lagged through wood floor into concrete unless wood floor is cut away from lag bases and provision made for expansion.)

MATERIALS & INSTALLATION. Install IRONBOUND (specify edge-grain or flat-grain) CONTINUOUS STRIP using material manufactured by Robbins Flooring Company (in strict accordance with their installation instructions and recommendations). All flooring shall be plainly MFMA trademarked by indentation on back and each bundle shall be plainly grade marked. Individual strips shall be manufactured with flat backs and suitable mastic recesses and shall be laid in end-butting courses in a full bed of IRONBOUND mastic, interlocked with 3/32" x ½" steel splines in long lengths, with end joints staggered in succeeding courses. Specify thickness, face width and grade (see below).

(A) Edge-grain manufactured in Northern Rock Maple, Northern Beech and Northern Birch. Suitable for heavy duty in manufacturing and industrial plants, gymnasiums, and in all belowgrade areas.

Standard Thicknesses: 33/32'' T&G,  $1\frac{1}{4}''$  T&G,  $1\frac{1}{2}''$ , 2'',  $2\frac{1}{2}''$ 

Face Widths: 33/32" and 11/4" thick both milled with special T&G, 1-1/16, 1-5/16, 15/8, 13/4. All other thicknesses are made in square edge only, 11/8, 13/8, 13/4" widths at mill's option.

Lengths: Principally 12" with not over 20% shorter lengths included in each shipment (at mill's option).

Grades: "2nd & Better", "Industrial" and "3rd Grade".

(NOTE: End grooves to receive splines must be in center of strips.)

(B) Flat-grain is manufactured in Northern Hard Maple, Northern Beech, Northern Birch, Northern Red and White Oak and special species when specified. 25/32" thickness is adaptable in classrooms, multi-purpose rooms, stores and other light-duty areas. 33/32" and 41/32" are used in bakeries, food plants, gymnasiums and manufacturing areas.

Standard Thicknesses: 25/32, 33/32, 41/32

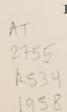
Face Widths: 2½ square edge, 3¼ square edge and 3½ square edge. Standard T&G 1½, 2, 2¼, 3¼. Special T&G 1¼, 15%, 23%.

Lengths: Principally 12" with not over 20% shorter lengths included in each shipment (at mill's option).

Grades: 1st, 2nd & better, 3rd & better, Industrial, 3rd grade.

(NOTE: End grooves to receive splines must be in center of strip.)

- (C) Grades are in accordance with the official grading rules of the Maple Flooring Manufacturers Association. 2nd & better grade generally used for gymnasiums, bakeries and areas where exceptional appearance is required. Industrial grade generally used in manufacturing areas and school shops.
- (D) Vacuum treating (optional). IRONBOUND flooring shall be vacuum treated by the Dri-Vac method with Woodlife preservative (or equal). Each bundle shall be stamped with the official treating plant number and a certificate attesting to the vacuum treating must be furnished for each shipment of flooring.
- (E) Sanding. All wood flooring shall be sanded by machine to a smooth even surface in accordance with flooring contractor's recommendations.
- (F) Finish. For industrial installations which are to be maintained by steel-wooling machines, apply one coat of IRONBOUND Penetrating Sealer or approved equal. For schools, except gymnasiums, apply two coats, each buffed with steel wool. See Page 6 for finishing gymnasium floors. (NOTE: For long-range maintenance, at reasonable cost, it is recommended that the IRONBOUND contractor be consulted.)
- (G) Floor Contractor. Installation must be made by a floor contractor approved by the manufacturer.
- (H) Guarantee. IRONBOUND floors are guaranteed by manufacturer and installer against defects in material and workmanship (damage resulting from excessive dampness, floods, fire, or exposure to chemical action excepted) for a period of one year (or longer if desired) from date of installation.





IRONBOUND CONTINUOUS STRIP Hardwood floors are found in the nation's finest buildings from coast to coast. The wide acceptance of IRONBOUND and the satisfaction it gives are illustrated by the following list of some IRONBOUND users and a few typical comments.

International Business Machines Corp. International Harvester Co. American Tobacco Co. Remington Rand Co. Sears, Roebuck & Co. General Electric Co. Chrysler Corp. Ford Motor Co. General Motors Corp. Great Atlantic & Pacific Tea Co. National Biscuit Co. **Holsum Bakery** Royal Baking Co. Langendorf United Bakers, Inc. David Freare Biscuit Co., Montreal, Que.

**Brandeis University** 

**University of Detroit** 

Des Moines Register Washington Post

Chicago Tribune
Chicago Sun Times

University of Rhode Island

Michigan State University

**Tulane University** 

It's the most solid, and it is one of the few gyms where I have never heard complaints from any participants about having sore calves, ankles, feet, etc. from the playing floor.

Middletown Community High School,

Middletown, Ill.

Our maintenance costs have been negligible and we are gratified by our own excellent judgment in having selected a good specification and a dependable contractor.

Palmer Physical Laboratory, Princeton University, N. J.

The maple floor that was installed in the building here in 1948 is holding up well under a terrific amount of traffic and hard use. We consider it an excellent floor.

Times-World Corp., Roanoke, Va.

Aside from being an ideal playing surface for basketball and our intramural program, it is also a beautiful floor. It takes and holds a polish exceptionally well.

Wellsville Central Schools, Wellsville, N. Y.

We would not hesitate to give this flooring our highest recommendation.

Bethesda Missionary Temple, Inc.,

Detroit, Michigan

Manufactured and distributed by:

### ROBBINS FLOORING COMPANY

Reed City and Ishpeming, Michigan

World's Largest Manufacturers of Maple Flooring Sold and installed by authorized floor contractors only.

### STORM FLOORING COMPANY, INC.

2650 Park Avenue

New York 51, New York

Telephone MOtt Haven 9-2700

AUTHORIZED IRONBOUND INSTALLER

